



## 2024 Mini Stock Rules

*These rules will be enforced to ensure that all who participate have an opportunity to be competitive. Anything not covered by these rules must be approved by Track Officials. Upon inspection, Track Officials may penalize, fine, suspend, withhold money, and/or points, confiscate parts, or disqualify any competitor for rule infractions. If a competitor is disqualified for using illegal parts, the competitor may lose all points accumulated prior to and including date of disqualification under the discretion of Track Officials. The use of carbon fiber or titanium parts are not allowed. Any questions regarding rules should be addressed with the Track Officials, prior to assuming legality. It is the competitors' responsibility to read and understand all rules. It is the competitors' responsibility to declare what engine option they are competing under.*

*The Mini Stock Division provides individuals the ability to learn the necessary skills to be successful in stock car racing and builds a strong foundation for advancement into other divisions.*

### 1. Approved Models

- A. 1977 thru present, mass-produced four (4) cylinder passenger cars. Both two (2) and four (4) door models are allowed.
- B. No convertibles, mini vans, or trucks. No rear, mid, rotary, or opposed engines allowed. No AWD, AWD conversions, or 4x4 models permitted.
- C. Pre-approval by a Track Officials is required for any questionable make/model.
- D. No two (2) seaters. All cars must have had a rear OEM seat.

### 2. Body

- A. Bodies:
  - a. Roof must be steel; Mustang may use factory replacement fiberglass roof. Any car using a fiberglass roof will be required to have a steel (22GA minimum) roof plate.
  - b. Doors, fenders, quarters, and trunk-lid may be steel or aluminum and must be stock in appearance and size.
  - c. Hoods must be stock, aftermarket steel, or fiberglass. No aluminum hoods will be permitted, even if OEM.
  - d. Tail section of the car must be closed with no cut-outs or openings permitted. Aftermarket nose and tail pieces are allowed. All bodies are required to be four (4)" inches from the ground. 1/4" allowance will be given. Installation with Dzus, or 1/4 turn fasteners.
  - e. Aftermarket Bodies: AR Bodies Muscles Car bodies matching the chassis manufacturer are allowed.
  - f. Body must be used in full, no mixing and matching of other panels/pieces.

- B. Inner Panels:
  - a. Stock firewall and floor pan must be intact. Floor pan may be fabricated but it must cover the entire floor area between the front and rear firewalls. Firewalls must remain in stock locations.
  - b. Floorboards are not required to match side to side.
  - c. Inner panels from any manufacturer can be used. They also may be fabricated.
- C. Spoilers:
  - a. Maximum 58" x 5" must be placed aft of the trunk lid or aft of the rear window base.
  - b. Spoilers may be constructed of Lexan, steel, or aluminum.
  - c. Stock spoilers are allowed.
  - d. Metal spoilers must be made from three (3) separate pieces with none of the three exceeding 20" inches in length.
  - e. Spoilers may not extend beyond the width of the deck lid.
- D. Windows:
  - a. Lexan windows may be used.
  - b. Quarter and rear windows are allowed but not required.
  - c. Undamaged stock front windshields may be allowed with prior Track Officials approval. Glass windshield is permitted as long as it is factory style safety glass.
- E. Rub Rails:
  - a. Exterior rub rails are allowed only between the front and rear tire and must stay in contact with the body their entire length.
  - b. Steel rails MUST be secured to the cage in two (2) places. Plastic rails may be riveted to body with a minimum rivet spacing of twelve (12") inches.
- F. Roof Rails:
  - a. Two (2) roof rails are permitted lengthways of the car.
  - b. Rails can be no longer than the steel roof panel.
  - c. Rails must be no higher than 1 1/2" above the surface of the roof.
  - d. Rails may be made of steel, aluminum, Lexan, or plastic and must be securely fastened to the vehicle.

### **3. Brakes**

- A. Four-wheel brakes must be in working order. Brakes must be OEM or OEM replacement type. No exotic, aftermarket, or racing calipers allowed. Cars can be converted to rear disc brakes using factory materials, factory materials can be used from ANY make and model.
- B. Aftermarket brake pedal assemblies with bias control are permitted.
- C. No aluminum brake drums allowed.

### **4. Chassis**

- A. A stock chassis may be tubed in front of strut towers, but must remain unaltered from strut or shock location to rocker panel. Chassis may be fabricated with tubing beyond rear strut or shock towers. Tubing can be used to connect front and rear subframes and must be identical side to side. Tubing is allowed to pass through either firewall. Caster/Camber plates are permitted, and the top of the strut tower may be slotted for adjustment.
- B. Roll Cage
  - a. Main cage must be constructed using a minimum of 1 1/2" x .095. Main cage is defined as "any area between factory firewalls".
  - b. Frame tubing must be a minimum of 2" x 2" x .125.
  - c. The drivers door bars must be plated (24 gauge minimum) or covered (.250 minimum) to reduce the risk of driver injury.
- C. Strut Towers

- a. Strut towers and shock towers must remain in factory locations. No movement of any factory placed suspension or chassis mounting points is permitted.
  - b. No modifications of stock sub frames is allowed (i.e. Cannot be cut open, tubed inside and resealed).
  - c. The engine crossmember must be OEM and unaltered.
- D. Excessive Tube/Repair: Any car using excessive tube to reinforce chassis from rust or crash damage will be subject to additional weight penalties as determined by Track Officials.

## **6. Drivetrain**

- A. Transmissions:
  - a. Transmission must be a stock unit for make; gear ratios may be swapped from other factory units. Must have four (4) forward gears in working condition. 5th gear lockouts may be used but will need to be removed for transmission inspections.
  - b. Cars with swapped engines may use the transmission that matches the engine, if it differs from the model.
- B. Driveshaft:
  - a. Driveshaft must be steel and painted white.
  - b. Shaft must have one (1) driveshaft loop 18" inches of the forward u-joint.
- C. Clutch:
  - a. Clutch must be functional, single disc, or puck style clutch with a stock finger-type pressure plate.
- D. Flywheel
  - a. **Option 1:** Must be steel and weigh a minimum of 10 lbs. when measured with Track tools. Weight will include mounting bolts. Must retain stock diameter.
  - b. **Option 2:** Flywheel may be made of any material, weigh a minimum of 8lbs., and be SFI Certified. For the Dodge Neon: Factory riveted clutch and flywheel assembly, weighing a minimum of 22 lbs. including the flex plate and mounting bolts.
  - c. **Option 3:** No Flywheel rules will be enforced with the acceptance of a 100 lb. penalty. Cars must declare this Option 3 rule before their first event of the season. Cars that have bypassed the flywheel rule and accept the 100 lb. penalty will be identified with the letter "F" on the windshield.

## **7. Engine**

- A. Engine Identification: All cars MUST have their engine size and minimum weight posted via vinyl decal or paint on either hood or windshield of the vehicle.
- B. Engine Setback: All cars with swapped engines must have transmission output shafts inline with center of front hubs.
- C. Variable Valve Timing (VVT):
  - a. All cars with a variable valve timing system will be required to use make specific engines. Cylinder head and block must match. No mixing of VVT engines, heads or block.
  - b. All VVT-equipped cars will add 75 lbs.
- D. Block:
  - a. Blocks must be stock for make.
  - b. 2540cc maximum displacement. Actual Displacement not advertised engine size will determine the minimum car weight.
  - c. Maximum overbore .060.
  - d. Compression ratio will not exceed 12 to 1.
  - e. No stroking/de-stroking of engine.
- E. Heads:

- a. Milling of head is allowed. No porting or polishing of any kind. The cylinder head must be stock for make. The combustion chamber must not be modified at all.
  - b. Ford 2.3 will be allowed to use Race Engineering Cast Iron replacement head.
- F. Valves:
- a. Oversized replacement valves are allowed. They must be used in conjunction with factory sized valve seats.
  - b. Stainless steel OE replacements allowed. Valves may use narrow stem. Ford 2.3 will be allowed to use 1.89/1.59 valve combination.
- G. Crankshaft:
- a. Crankshaft MUST be OEM stock. No knife edging or weight removal is allowed.
  - b. No aftermarket cranks.
  - c. Crankshafts may be balanced.
  - d. Aftermarket pulleys are allowed.
- H. Camshaft:
- a. Valve train must match make, model, and year of engine declared.
  - b. 16 valve max lift is .470" and 8 valve max lift .550" when measured at the valve flat tappet or Factory roller style valve train. Lift is measured at the outermost portion of the valve retainer.
  - c. Variable Timing (VTEC) will require camshaft removal for lift inspection. ALL LOBES will be checked on VTEC equipped cars.
- I. Pistons & Rods:
- a. Must be stock appearing.
  - b. No lightweight piston or rods allowed.
- J. Carburetor:
- a. Holley 7448 350cfm Max.
  - b. Choke plate MUST be removed to allow inspection.
  - c. One (1)" inch spacer or adapter between intake and carburetor allowed.
  - d. Carburetors are subject to outside flow-bench testing for flow capabilities.
  - e. Carburetors found illegal will be confiscated.
- K. Fuel Injection:
- a. Fuel injection is allowed. Any size fuel injectors may be used.
  - b. Any size throttle body may be used for fuel injection.
- L. Air Filter:
- a. Air filter may stick above the hood but will need to be covered so the filter is not exposed to open air.
  - b. Electronic Fuel Injection (EFI) cars must leave the air filter in the engine bay. The filter must not extend ahead of the radiator.
  - c. An air filter spacer in between the carburetor and the filter is allowed up to one (1)" inch. One filter only.
  - d. Maximum diameter of the intake tube is three (3)". the minimum length, not including air filter, is fourteen (14)".
- M. Intake Manifold:
- a. Must use a stock intake for make and engine used. No porting or polishing of any kind.
  - b. Gasket matching is legal, but you must use the Fel-Pro Gasket for the engine declared. The maximum gasket match will be 1/2" (0.500"). 8 Valve cars may use aftermarket or fabricated intake manifolds.

## **8. Engine Cooling**

- A. Any radiator may be used and must be mounted forward of engine.
- B. No antifreeze allowed.

## **9. Exhaust**

- A. Headers will be allowed; Ford will not be allowed to use Thunder Valley or any 1 3/4" primary tube header.
- B. 2.5" maximum exhaust pipe diameter after muffler.
- C. All cars will be required to run a muffler.
- D. Cars that are deemed too loud (96dB) for competition will be asked to conform. Failure to meet such requests will disqualify any finishes made in that event.

## **10. Fuel**

- A. Fuel Cell:
  - a. Fuel cell maximum capacity is (12) gallons.
  - b. Fuel cell must be enclosed in a steel container. Fuel cell must have a rear crush bar in case of accident. Fuel cell must have a steel firewall mounted in between the fuel cell and driver (separate from drivers compartment). No aluminum may be used in front or rear firewalls. Fuel cell must have a cage constructed of a minimum one (1)" inch square tubing.
  - c. Fuel cell must be mounted behind the centerline of the rear axle, unless pre-approved by Track Officials. Fuels lines permitted to run through the drivers compartment as long as they are fully encased in conduit and labeled.
- B. Fuel lines:
  - a. Fuel lines are permitted to run through the drivers compartment as long as they are fully encased in conduit and labeled.
  - b. High pressure clamps and fittings only. Hose clamps are not permitted.
- C. Fuel Pump
  - a. Electric fuel pump must have switch clearly marked. Electrical ON/OFF switch must be within reach from outside of car.
  - b. Cars running fuel injection will require an oil pressure shut off switch.

## **11. Ignition & Electrical**

- A. Starter:
  - a. Any starter in working condition.
  - b. Starter must engage the flywheel. Small diameter clutches utilizing a flex plate are not permitted.
- B. Ignition:
  - a. Stock ignition systems only. No magnetos or MSD systems allowed.
  - b. High output coils are permitted if stock appearing.
  - c. Aftermarket distributors may be used and must run from factory electronics. MSD is not permitted.
- C. Electronic Fuel Injection(EFI):
  - a. EFI computer must be stock OEM-style. Factory computer upgrades are allowed. Chips and Flashes are permitted to re-tune settings.
  - b. The actual factory computer unit must be used. No standalones are permitted.
- D. Firewalls/Wires:
  - a. All wires and/or fuel lines that cross through any firewall will be required to maintain a rubber grommet to prevent arcing.
- E. Battery:
  - a. Battery must be located forward of the fuel cell. It is suggested that the battery not be mounted within the engine compartment.
- F. Battery must be secured by a minimum of two (2) fasteners.

## **12. Lettering & Appearance**

- A. All cars must be numbered. All numbers must be confirmed with Track Officials. Tracks reserves the rights to reassign numbers to avoid scoring duplications. Car registration for cars that raced the previous year (minimum of 3 races) will have first refusal of numbers until January 31st, then will be first come first serve, if duplicate number requested will refer to previous year's points.
- B. All cars must have numbers on both doors and roof. All numbers must be a minimum of 18" and must be registered and approved. Roof numbers must face the passenger's side. All numbers must be distinctly contrasting to the color of the car. No reflector or metallic numbers. All numbers to be subject to visual approval of Track Officials.
- C. All cars must be presentable on race day and subject to Track Officials approval
- D. All cars must have their total weight and left side weight decal on the right front corner of the roof, and their RaceDay Productions Safety decal on the left front corner of the roof.

## **13. Mirrors**

- A. Permitted.

## **14. Rear Ends**

- A. Rear End:
  - a. Rear end must be factory for make and model used.
  - b. No quick change or 9" units allowed.
- B. Assemblies: No aluminum components allowed.
- C. Control Arms:
  - a. Control arms may be reinforced. Offset bushings allowed.
  - b. Fabricated heim joint arms are allowed. Quarter inch (1/4") adjustments plus or minus allowed on the Heim joints.
- D. Camber: No camber changes allowed to rear wheel drive solid (non- independent) rear ends.

## **15. Ride Height**

- A. All cars must meet a four (4)" suspension ride height. Ride height will be measured at the factory floorboard next to the unibody. If floorboards are not in stock location, the lowest point of the frame rail must be four (4)" inches.

## **16. Safety - POSTED IN RACE PROCEDURES**

### **17. Seat**

- A. A Full containment racing seat must be used. Containment system is defined by a one (1)-piece, two (2)-side reinforced headrest, and two (2) reinforced shoulder rests. Bolt on containment systems allowed.
- B. Headrest must be mounted to the chassis or in accordance with manufacturer specifications.

### **18. Steering & Suspension**

- A. Suspension mounting points must remain stock. Control arms, spindles, etc. must remain stock. Items not covered may be fabricated and altered for performance enhancement. Excessively modified or altered parts may be deemed illegal for competition.
- B. Shocks:
  - a. OEM or stock replacement shocks and struts only. Bilsteins are permitted. No racing, or adjustable shocks/struts allowed. No performance or threaded body shocks/struts allowed. Non-damping adjustable Coilover Kits are permitted. No damping adjustment provisions are permitted on any make or model.
  - b. Maximum one (1) shock/strut per wheel and four (4) per car.

- c. Coilover sleeve kits allowed. Sleeve kit must attach to unaltered DOT/OEM replacement shock.
  - d. Weight jack and adjustable spring cups are permitted.
  - e. Adjustable strut plates are allowed.
- C. Springs: Racing springs allowed. Any diameter and any height permitted.
- D. Sway Bars: Any size sway bar may be used in the front or rear. Sway bar does not need to be factory for make/model used.
- E. Bolt-Ons:
- a. All suspension parts (a-frames, spindles, hubs, etc.) must be unaltered OEM. No cutting, bending, or grinding permitted.
  - b. Spindles must match side to side.
  - c. Mustang may use QA1 K-Member.
- F. Control Arms:
- a. Rear control arms may be fabricated from heim joints and radius rods. RWD may have a 1/4" adjustment plus or minus stock length.
  - b. Aftermarket OEM-dimension, non-adjustable control arms may be used.
- G. Modified Upper Control Arms:
- a. On cars where no factory camber adjustment is given, cars may be allowed to modify factory upper control arms. Caster-camber plates may not be used. Control arms may be shortened or lengthened one (1)" inch. Control arm legs must be the same length.
  - b. Aftermarket control arms and hardware may be used. All modified control arms require Track Officials approval. Approved control arms will be marked and sealed to prevent further modifications without approval. It is the race teams responsibility to seek and receive this approval and seal.

## 19. Steering Shaft

- A. Aftermarket steering shaft recommended.
- B. Quick release steering wheels are required.
- C. Steering wheel can be made out of steel or aluminum.

## 20. Transponders/Scanners/Radios/Electronics/Cellular Phones

- A. Transponder- All cars must be equipped with a transponder and must be operational at all times during practice, qualifying, and features. If at any time your transponder isn't working, you will be Black flagged off the track. Transponder will be mounted on the right rear frame rail (inside or outside) exactly twelve (12)" inches to the rear of the centerline of the rear axles.
- B. Scanners- Each competitor **MUST** have a one-way scanner programmed to 454.000 at all times during practice, qualifying, and feature event, so Track Official/Race Control/Scoring can stay in contact.
- C. Cars will not be allowed to carry "ANY" on board computers, micro-controllers, processors, recording devices, electronic memory chips, traction control devices, or digital readout gauges. Cellular phones are not allowed in cars at any time. Go-Pro type devices must be approved by Track Officials prior to use.
- D. No 2-Way Radios allowed. No 2-Way Communication allowed.

## 21. Tread Width

- A. Maximum tread width 72" inches measured bead to bead. Bead is defined as the outside lip of the wheel used.

## 22. Weight

- A. Base weight:
  - a. All race cars with 1.7 liter or greater engine will weigh a minimum of 2200 lbs with 55% maximum left side weight.

- b. All race cars with 1.6 liter or smaller will weigh a minimum 2150 lbs with 55% maximum left side weight.
- B. Lead weight may be added to achieve percentages and overall weight required by Track Officials. All lead must be painted white and have the car number painted or etched onto the lead. Any cars losing a piece of lead during a race will face immediate disqualification.

### **23. Wheels & Tires**

- A. Wheels:
  - a. 7" or 8" inch wide wheels with any production offset may be used. 13" and 14" inch wheels only. No mixing of rim diameter or width on the car.
  - b. Spacers may be used.
  - c. Racing wheels required.
  - d. NO homemade or altered wheels will be allowed. One (1)" inch lug nuts are required on all four (4) wheels.
- B. Tires:
  - a. Hoosier 800 23" and 800 23.5" required for competition.
  - b. Durometer testing of tires will be conducted throughout the race event starting with the first practice. Each tire will be checked in a minimum of three (3) locations. All locations must be 45pts. or greater to pass.

### **25. Wheelbase**

- A. OEM Wheelbase must be maintained +/- 3/4" inch.

Any 2024 rule may be adjusted to ensure an Equal and Competitive racing division and not to disallow any car to not compete during the 2024 season.

It is the responsibility of the competitor to read and understand these rules. If you have questions about any of these rules, please ask your Track Official before building.

Any interpretation or deviation of these rules and/or procedures is left to the discretion of Track Officials and/or Track Management. Their decisions are final.

If there is a rule that your car does not comply to please contact Track Officials so we can see if there is a solution

**Rules may be adjusted to meet the needs to equal the playing field without notice.**